



2016 Immunization Updates: Influenza, Meningococcal, Tdap, Hib, Rotavirus

Each year, the California Medi-Cal Drug Use Review (DUR) program issues an annual summary of updates on immunization guidelines, products, and/or research in collaboration with the California Department of Public Health (CDPH) Immunization Branch. For reference, the recommended immunization schedules for 2016 in the United States can be accessed on the Centers for Disease Control and Prevention (CDC) website:

- [Persons aged 0 through 18 years](#)
- [Persons aged 19 years or older](#)

Influenza Vaccine

As in prior years, all individuals 6 months of age and older are recommended to be immunized this season with either inactivated influenza vaccine (IIV) or recombinant influenza vaccine (RIV). In comparison to last year, the 2016 – 2017 influenza vaccines have a different influenza A (H3N2) virus component. Trivalent vaccines protect against a different influenza B virus (Victoria lineage).

There is an important change to the recommendations regarding the live attenuated influenza vaccine (LAIV), also known as the “nasal spray” flu vaccine. Based on data showing poor or relatively lower effectiveness of LAIV from 2013 through 2016, the federal Advisory Committee on Immunization Practices (ACIP) made an interim recommendation against the use of LAIV during the 2016 – 2017 flu season.

A recent study of almost 250,000 women and infants found that infants born to mothers who reported getting a flu vaccination while pregnant had a 64% risk reduction in influenza-like illness in their first 6 months of life and an 81% risk reduction for hospitalization due to influenza. Based on these results, the authors of the study concluded that influenza immunization for pregnant women should be a public health priority.

For additional recommendations for influenza vaccine dosing in children, older adults, and among persons with a history of egg allergy, see the complete ACIP recommendations for the 2016 – 2017 influenza season, which can be accessed on the [Centers for Disease Control and Prevention Morbidity and Mortality Weekly Report](#) on the CDC website.

Meningococcal Vaccine

On June 24, August 3, and August 16, 2016, CDPH issued [Clinician Health Advisories](#) related to an outbreak of invasive meningococcal disease occurring in Southern California, primarily among adult men who have sex with men (MSM). Meningococcal disease is caused by the bacteria *Neisseria meningitidis*. Although rare, meningococcal disease is serious and potentially fatal.

Since March 2016, at least 24 confirmed cases of serogroup C meningococcal disease, including two fatal cases, have been reported among residents of Los Angeles and Orange counties and the City of Long Beach (data are current as of August 16, 2016). Of the first 24 cases, 22 are men, and of these, 19 identified as MSM. Persons with Human Immunodeficiency Virus (HIV) infection are known to be at increased risk of meningococcal disease, and two outbreak cases had HIV infection. This is the largest known meningococcal disease outbreak to date among MSM in the United States.

Quadrivalent meningococcal conjugate vaccines (MenACWY or MCV4) protect against serogroup C disease, the serogroup causing clusters and outbreaks among MSM. CDPH advises that healthcare providers recommend MenACWY vaccination for:

- All MSM residing in Los Angeles, Orange and San Diego counties and the City of Long Beach
- MSM who plan to travel to Los Angeles or Orange counties or the City of Long Beach (to be effective, vaccination should occur at least two weeks prior to travel)
- All HIV-infected persons in California

The Department of Health Care Services (DHCS) would like to remind pharmacy providers that meningococcal vaccines recommended for at-risk individuals (including meningococcal conjugate vaccines) are covered without an approved *Treatment Authorization Request*. Under current pharmacy law, qualified pharmacists may administer the vaccination to at-risk patients without obtaining a prescription from a physician. DHCS encourages pharmacy providers to order and stock the appropriate meningococcal vaccines and actively encourage at-risk persons to get vaccinated.

Complete recommendations for use of meningococcal vaccines are on the [Meningococcal ACIP Vaccine Recommendations](#) Web page of the CDC website.

Tetanus Toxoid, Reduced Diphtheria Toxoid, and Acellular Pertussis Vaccine (Tdap)

Since January 2016, there have been 37 cases of pertussis in California among infants younger than 4 months of age. Twelve of the mothers who had babies who later developed pertussis had not been vaccinated during pregnancy. When interviewed in more detail, six of them did not remember a provider recommendation and five reported refusing provider recommendations. This suggests more focus should be put into provider and patient education about the significance of prenatal Tdap vaccination.

Women should get Tdap vaccination at the earliest opportunity between 27 and 36 weeks gestation of every pregnancy. This is vital to both decrease the risk of pertussis infection in the mother and provide the baby with antibody protection from the mother until the baby is old enough to be vaccinated.

Postpartum Tdap vaccination and cocooning are no longer considered optimal strategies to prevent pertussis in infants. For further information, refer to the [Immunization Priorities to Prevent Infant Pertussis](#) document available on the CDPH website.

Haemophilus Influenzae Type B (Hib) Vaccine

In January 2016, the United States Food and Drug Administration (FDA) approved a new indication for Haemophilus b conjugate vaccine (tetanus toxoid conjugate) for a three-dose infant primary vaccination series at 2, 4, and 6 months of age. Expanding the age indication to include infants provides another vaccine option in addition to other currently licensed monovalent or combination Hib vaccines recommended for the primary vaccination series.

Rotavirus Vaccine

Currently, there are two rotavirus vaccines licensed for the United States pediatric population (a three-dose series and a two-dose series). ACIP guidelines recommend the same rotavirus vaccine series be completed with the same vaccine brand but allow for administering mixed vaccine types (using a three-dose series) if the previous dose is unavailable or unknown. A recent study of over 2,400 children found that mixing vaccine types to achieve a three-dose series was just as effective as completing the series with only one rotavirus vaccine type.